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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,863	11/26/2003	Leon Bottou	112817CON-2 (ATT.0140002)	6071

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EXAMINER	
CHEN, WENPENG	

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/721,863	BOTTOU ET AL.	
	Examiner	Art Unit	
	Wenpeng Chen	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15,16 and 20-27* is/are allowed.

6)☒ Claim(s) *17-19 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/26/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Examiner's Remarks

1. The Applicants indicated that Claims 15-28 relate to claims 16-29 of the prior application. The Examiner compared Claims 15-28 of the present application with Claims 16-29 of the prior application 09/947,410. Features of "coded image data signal," "coded image data," or "coded data signal" claims of application 09/947,410 are now recited in the method claims of the present application. The Examiner's positions with regard to prior art are thus maintained similarly here.

Specification

2. The disclosure is objected to because of the following informalities: Application 09/947,410 has been issued as US patent 6728411. The first paragraph shall be amended to reflect the new status.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed

in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 17-19 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Das et al. (US patent 5,896,176 cited previously in parent case and in IDS of the present application.)

Das teaches a method coding data of an image having a non-masked (visible, foreground) image area and a masked (non-visible, background) image area. (Fig. 12) The method can be read to meet the requirements of Claims 17-19 with the following interpretation: the region of interest (ROI), the region outside ROI, and the motion compensated residual image to be a visible and foreground image area, a non-visible and background image area, and the corrected reconstructed image data, respectively.

The method comprises:

-- coding the data by wavelet decomposition as coefficient data; (column 12, lines 9-19; column 13, lines 37-45; wavelet decomposition in Fig. 12)

-- canceling a selected wavelet coefficient; (column 13, lines 46-63; Because only coefficients within ROI are considered and coded, the coefficients outside the ROI are canceled.)

-- generating reconstructed image data for the visible and foreground image area and the non-visible and background image area from the remaining wavelet coefficients; (column 13, line 63 to column 14, line 3; wavelet reconstruction in Fig. 12; The reconstruction generates image data for both the visible image area and the non-visible image area.)

-- correcting the reconstructed image data in the visible and foreground image area; (column 14, lines 4-18; column 13, lines 5-14; Because the details of the correcting step are not

specified, the Examiner considered the motion compensated residual image, which is derived based on the information of the reconstructed image data in the visible image area, is the corrected reconstructed image data.)

-- correcting the reconstructed image data only in the visible and foreground image area; (column 13, lines 28-37; Because the values of the residual image outside ROI are set to zero, the reconstructed image data is only corrected in the visible image area without regard to the reconstructed image data in the non-visible region.)

-- coding the corrected reconstructed image data by wavelet decomposition as second coefficient data; (Fig. 12; column 13, lines 15-62)

-- outputting the second coefficient data. (output bit stream of Fig. 12)

Because the ROI data are local information, the wavelets representing the ROI are locally supported wavelets. The above method also meets the requirements recited in Claim 28.

Allowable Subject Matter

5. Claims 15-16 and 20-27 are allowed.

The prior art does not teach or fairly suggest the recited Claim 15 that specifically comprises the following limitations:

-- coding a background image as a plurality of image coefficients;

-- *canceling any image coefficients associated with spatial areas occupied by the foreground image*;

-- *reconstructing image data in a background image area* and in the foreground image area *based on the remaining coefficients*;

-- *correcting the image data in the background image area*,

-- *coding the corrected reconstructed image data as a second plurality of image coefficients*,

-- *canceling any second image coefficients associated with spatial areas occupied by the foreground image* area.

The prior art does not teach or fairly suggest the recited Claims 20 and 26 that specifically comprise the following limitation:

-- *canceling coefficients of masked image data*;

-- *reconstructing image data* based on coefficients of *non-masked* image data,

-- for any portion of the reconstructed image *data that lies outside of the mask*, *substituting the original image data therefor,* and repeating the generating, canceling, reconstructing and substituting steps at least once unless convergence is reached.

The prior art does not teach or fairly suggest the recited Claim 21 that specifically comprises the following limitations:

-- *canceling coefficients located below a mask* as recited;

-- *reconstructing* image data based on *the remaining coefficients*;

-- for any portion of the reconstructed image data located *outside of the mask, substituting original image data* therefor, and repeating the generating and canceling steps at least once unless the reconstructed image data converges to the original image data outside of the mask.

The prior art does not teach or fairly suggest the recited Claim 23 that specifically comprises the following limitations:

-- *identifying* transform *coefficients* associated with image data *below the mask* as recited;

-- for *each identified transform coefficient w*, modifying the coefficient as recited;

-- *reconstructing image* data *from the modified transform coefficients and the unaltered transform coefficients,* and *for any portion* of the reconstructed image data x' that *differs from a corresponding portion* of the image data x, *setting the reconstructed image data as recited.*

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Wenpeng Chen
Primary Examiner
Art Unit 2624

April 10, 2006